



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,903	12/28/2000	Paul Kirkby	476-1981	2728

23644 7590 06/28/2005

BARNES & THORNBURG
P.O. BOX 2786
CHICAGO, IL 60690-2786

EXAMINER

NGUYEN, HAI V

ART UNIT PAPER NUMBER

2142

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/750,903	Applicant(s) KIRKBY ET AL.	
Examiner Hai V. Nguyen	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 December 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 21-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 21-36 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

Art Unit: 2142

DETAILED ACTION

1. This Office Action is in response to the communication received on 30 December 2004.
2. Claims 1-20 are cancelled.
3. Claims 21-36 are new and presented for examination.

Response to Arguments

4. Applicant's arguments and amendments filed on 30 December 2004 have been fully considered but they are not to be persuasive. Applicant's arguments are deemed moot in view of the following new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment (*i.e., claims 1-20 are cancelled, claims 21-36 are added*) to the claims which significantly affected the scope thereof.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 21-36 are rejected under 35 U.S.C. 102(b) as being anticipated by **Berger et al. U.S. patent #: 5,274,644.**

7. As to claim 21, Berger teaches substantially the invention as claimed, including a method of controlling the admission of a traffic flow (*a traffic class i*) to a communications network, the method comprising the steps of:

Art Unit: 2142

sampling an aggregated traffic flow on a network resource to which the traffic flow is to be admitted to obtain a mean bandwidth measurement (*minimum use of the resource*) and a bandwidth variance measurement (*unused or extra capacity or spare bank*) of said aggregated traffic flow (*col. 3, lines 9-48*);

determining from said mean bandwidth and variance measurements a price for bandwidth (*minimum guaranteed or contracted or pre-assigned nominal rate*) and a separate price for variance (*a deterministic rate*) (*col. 5, line 63 – col. 6, line 21*);

sampling the traffic flow (*the traffic class i*) to be admitted to the network resource to measure its mean bandwidth and variance (*Fig. 2; col. 3, lines 9-48*); and

applying to said traffic flow the separate prices for bandwidth and variance as a means of controlling admission of the traffic flow to the network resource (*col. 3, line 49 – col. 4, line 38*).

8. As to claim 22, Berger teaches, wherein the price for bandwidth is determined as a price for unit bandwidth (*minimum guaranteed or contracted or pre-assigned nominal rate*) and the price for variance is determined as a price for unit variance (*a deterministic rate*).

9. As to claim 23, Berger teaches, wherein a total price for admission of the traffic flow to the network resource is provided to an admission controller of said traffic flow, said total price comprising the sum of the following products: i) the measured mean bandwidth of the traffic flow times the price per unit bandwidth for using the network resource; and ii) the variance of the traffic flow times the price per unit variance for using the network resource (*col. 3, line 9 – col. 4, line 38*).

Art Unit: 2142

10. As to claim 24, Berger teaches, wherein an admission controller associated with the traffic flow regulates at least one of the mean bandwidth and variance of said traffic flow (*Fig. 1, the processor 120; col. 3, line 9 – col. 4, line 38*).
11. As to claim 25, Berger teaches, wherein said admission controller comprises an ingress controller in an edge node of the communications network (*Fig. 1, the processor 120; col. 3, line 9 – col. 4, line 38*).
12. As to claim 26, Berger teaches, wherein respective maximum control limits are defined for both the mean bandwidth and bandwidth variance components of the aggregated traffic flow on the network resource (*Fig. 6; item 603, cost(i), col. 9, lines 17-32*), and wherein at least one of said price for bandwidth and price for variance is increased as any of the mean bandwidth and variance measurements of said aggregated traffic flow approaches its respective limit (*Fig. 5, item 513, limit(j); col. 8, line 58 – col. 9, line 17*).
13. As to claim 27, Berger teaches, wherein the determination of the bandwidth price is a function of the difference between the measured mean bandwidth of the aggregated traffic flow and the mean bandwidth control limit, and of the first and second derivatives against time of said function (*Fig. 3, items 304, 301; col. 6, line 47 – col. 7, line 27*).
14. As to claim 28, Berger teaches, wherein the determination of the variance price is a function of the difference between the control limit and the sum of the measured variance of the aggregated traffic flow and a standard deviation corresponding to said variance, and of the first and second derivatives against time of said standard deviation (*Fig. 4, items 402, 401; col. 7, line 28 – col. 8, line 8*).

Art Unit: 2142

15. Claim 29 is corresponding an apparatus plus function claim of claim 21;

therefore, it is rejected under the same rationale as in claim 21.

16. Claims 30-34 are similar limitations of claims 22-23, 26-28; therefore they are

rejected under the same rationale as in claims 22-23, 26-28.

17. Claim 35 is corresponding an apparatus claim of claim 21; therefore, it is rejected

under the same rationale as in claim 21.

18. Claim 36 is corresponding a computer readable medium claim of claim 21;

therefore, it is rejected under the same rationale as in claim 21.

19. Further references of interest are cited on Form PTO-892, which is an

attachment to this action.

Art Unit: 2142

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

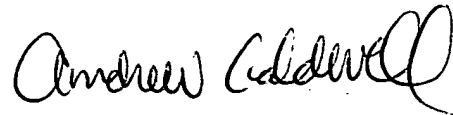
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 571-272-3901. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2142

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai V. Nguyen
Examiner
Art Unit 2142



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER